

A- Select false or true of the following statements :(10 Marks)

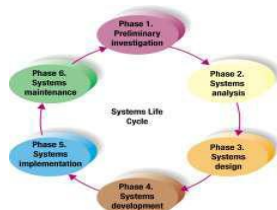
1. Data flow diagrams show the data or information flow within an information system. **True.**
2. Objects are the data fields an object owns. **False.**
3. Supercomputers used by medium-size companies. **False.**
4. Form : printed output generated from tables or queries. **False.**
5. Communication systems are electronic systems that save data on hard disk. **False.**
6. Physical Connections do not use a solid substance medium to connect sending and receiving devices. **False.**
7. Ring Network useful in centralized organizations. **False.**
8. Accuracy relates to who owns data and rights to software. **False.**
9. In Object-Oriented Database, Objects contain only data. **False.**
10. In Keyword search : You select a category or topic that fits the information you want. **False.**

B- Choose the right answer :(10 Marks, each 2 Marks)

1. **In systems analysis and design, selecting the best system is part of :**
 - a. Phase 2 – Analysis
 - b. Phase 3 Design. **x**
 - c. Phase 4 Development.
2. **Primary key is:**
 - a. Record that contains all the information about one person, thing, or place.
 - b. filed that uniquely identifies each record. **x**
 - c. smallest unit of information about a record.
3. **Protocols are:**
 - a. The rules people follow when using software, hardware, and data.
 - b. Set of communication rules for the exchange of information. **x**
 - c. Communication devices.
4. **Intranets is:**
 - a. Private network that connects organizations.
 - b. Private network within an organization. **x**
 - c. A worldwide network.
5. **Hard-Disk Packs is:**
 - d. Groups of inexpensive hard-disk drives are grouped together.
 - e. Hard-Disk Cartridges.
 - a. Removable hard disk, Massive storage capacity, Common in mainframes. **x**

C- Answer following: (30 Marks each 5 Marks)

1. Draw or write the six phases of the systems life cycle.



Initial Investigation
Analysis
Design
Development
Implementation
Maintenance

2. Write the five classifications of databases (usage of databases).

Individual or microcomputer database
Company or share
Distributed
Commercial
Web database

3. Describe the three types of functions of operating system.
Manages computer resources
Provides user interface (GUI)
Runs applications
4. Write four parts of Decision Support Systems DSS.
User
System software
Data
Decision models
5. Draw and write the Four basic elements of communication systems.
Sending and receiving devices
Communication channel
Connection devices
Data transmission specifications



6. Write three types of Malicious Programs.
Viruses
Worms
Trojan horse

D- Select false or true of the following statements :(10 Marks)

11. The instructions are made up of statements used in a programming language, such as BASIC, C, or Java. **True.**
12. Attributes are instructions for retrieving or manipulating attribute values. **False.**
13. Information: the raw, unprocessed facts including text, numbers, images, and sounds. **False.**
14. Utilities (service programs) allow input and output devices to communicate with the rest of the computer system. **False.**
15. Numerous applications like Instant messaging depend on communication systems. **True.**
16. Connectivity don't use computer networks to link people. **False.**
17. Hierarchical Network useful in decentralized environment. **False.**
18. Property relates to the responsibility of those who have data to control and who is able to use that data. **False.**
19. In Object-Oriented Database, Objects contain only instructions. **False.**
20. The application generation subsystem provides tools for maintaining and analyzing data. **False.**

E- Choose the right answer :(10 Marks, each 2 marks)

1. Objects are:
 - a. specific instances of a class that can contain both data and instructions to manipulate the data. **X**

- b. the data fields an object owns.
 - c. instructions for retrieving or manipulating attribute values.
- 2. Sockets:**
- a. provide a connection point for specialized cards or circuit boards.
 - b. provide pathways to support communication.
 - c. provide a connection point for chips. **X**
- 3. Operational models :**
- a. assist top-level managers in long-range planning
 - b. help middle-level managers control the work of the organization
 - c. help lower-level managers accomplish the organization's day-to-day activities. **X**
- 4. Dial-Up connection services :**
- a. Uses existing TV cable.
 - b. Uses air Connections.
 - c. Uses existing phone lines. **X**
- 5. The relationship in Network Database are:**
- a. One-to-many.
 - b. Many-to-many. **X**
 - c. one-to-one.

F- Answer following: :(30 Marks, each 5 marks)

1. Draw or write the six steps of software development.



Program specification
Program design
Program code
Program test
Program documentation
Program maintenance

2. What are the five types of databases?

Hierarchical database
Network database
Relational database
Multidimensional database
Object-oriented database

3. Write the five parts of an information system.

People.
Procedures.
Software.
Hardware.
Data.

4. Draw three of Common network Strategies, with naming its main components.



Terminal
Client/server
Peer-to-peer

5. Write three type of predetermined reports that Management information system (MIS) Produces.

Periodic

Exception

Demand

6. Give 5 examples of basic *general-purpose applications*.

Browsers

Word processors

Spreadsheets

Database management systems

Presentation graphics

G- Select false or true of the following statements :(10 Marks).

1. Data is facts or observations about people, places, things and events. **True**
2. Expansion cards are Adapter cards. **True**
3. Checklist is a data analyzing tool. **True**
4. Flash memory is a new type of ROM. **False**
5. Crackers, typically, they are not criminals. **False**

H- Choose the right answer :(10 Marks)

1. **Acquiring hardware is part of:**
 - a. System analysis phase.
 - b. System development phase. **x**
 - c. System design phase.
2. **The relationship in Hierarchical Database are:**
 - a. One-to-many. **x**
 - b. Many-to-many.
 - c. one-to-one.
3. **Internal Hard Disk is:**
 - a. Hard-Disk Cartridges.
 - b. Removable hard disk, massive storage capacity, common in mainframes.
 - c. Fixed disk used to store the operating system and major applications. **x**

C. Answer two questions of following: :(20 Marks)

1. Write four needs of databases.
Sharing, Security, Less data redundancy, Data integrity
2. Draw the Star network topology diagram.



3. Write four parts of Decision Support Systems DSS.
User, System Software, Data, Decision models.

D. Link the equivalent words of following groups :(10 Marks)

- | |
|------------------------------|
| a. Table 3 |
| b. Distributed 1 |
| c. Grid charts 4 |
| d. Multidimensional 2 |

- | |
|-----------------------------------|
| 1. Database uses |
| 2. Database structure |
| 3. Collection of related records. |
| 4. Analyzing tools |


I- Select false or true of the following statements :(10 Marks)

- 21. Data stored on secondary storage need to be translated from the 1s & 0s when it is sent to the CPU for processing. **False**
- 22. Media or *medium*: *the actual physical material that holds the data*. **True**
- 23. Procedures: programs consisting of step-by-step instructions that tell the computer how to do its work. **False**
- 24. Home networks is kind of Wide area networks WAN. **False**
- 25. Uninstall *utilities* make copies of important files in case the original are lost. **False**

J- Choose the right answer :(10 Marks)

- 1. **Dial-Up connection services :**
 - b. Uses existing TV cable.
 - c. Uses air Connections.
 - d. Uses existing phone lines. **x**
- 2. **Terminals are:**
 - a. An input and output device. **x**
 - b. Audio-Input Devices (MIDI).
 - c. Audio-Output Devices.
- 3. **Designing alternative systems is part of:**
 - a. System analysis phase.
 - b. System development phase.
 - a. System design phase. **x**

C. Answer three questions of following: :(30 Marks)

- 1. Write four of subsystems of a database management system.
 - Data definition subsystem**
 - Data manipulation subsystem**
 - Application generation subsystem**
 - Data administration subsystem**
- 2. Draw the Bus network topology diagram.

- 3. Write the five parts of an information system.
People, procedures, software, hardware, and data.
- 4. Write the three primary privacy issues.
Accuracy, Property, Access

D. Link the equivalent words of following groups: :(10 Marks)

- a. Webcam **5**
- b. Web authoring **2**
- c. TV tuner **4**
- d. Embedded OS **3**
- e. Antivirus **1**

- 1. System software
- 2. Application software
- 3. Operating system
- 4. Expansion cards
- 5. Input device

K- Select false or true of the following statements :(10 Marks)

26. Data stored on secondary storage need to be translated from the 1s & 0s when it is sent to the CPU for processing. **False**
27. Media or *medium*: *the actual physical material that holds the data*. **True**
28. Procedures: programs consisting of step-by-step instructions that tell the computer how to do its work. **False**
29. Home networks is kind of Wide area networks WAN. **False**
30. Uninstall *utilities* make *copies of important files in case the original are lost*. **False**

L- Choose the right answer :(10 Marks)

4. Dial-Up connection services :

- e. Uses existing TV cable.
- f. Uses air Connections.
- g. Uses existing phone lines. **x**

5. Terminals are:

- d. An input and output device. **x**
- e. Audio-Input Devices (MIDI).
- f. Audio-Output Devices.

6. Designing alternative systems is part of:

- c. System analysis phase.
- d. System development phase.
- b. System design phase. **x**

E. Answer three questions of following: :(30 Marks)

5. Write four of subsystems of a database management system.

Data definition subsystem

Data manipulation subsystem

Application generation subsystem

Data administration subsystem

6. Draw the Bus network topology diagram.



7. Write the five parts of an information system.

People, procedures, software, hardware, and data.

8. Write the three primary privacy issues.

Accuracy, Property, Access

F. Link the equivalent words of following groups: :(10 Marks)

- a. Webcam **5**
- b. Web authoring **2**
- c. TV tuner **4**
- d. Embedded OS **3**
- e. Antivirus **1**

- 1. System software
- 2. Application software
- 3. Operating system
- 4. Expansion cards
- 5. Input device

M- Select false or true of the following statements :(15 Marks, each 3 marks).

6. Software is most important part of any system. **False**
7. Database: is an integrated collection of logically related tables. **True**
8. System Clock holds current data & time. **False**
9. Media or *medium*: *the actual physical material that holds the data*. **True**
10. Hierarchical Network useful in decentralized environment. **False**

N- Choose the right answer :(15 Marks, each 5 marks)

1. What is Output:

- a. A Monitor.
- b. Any data or instructions used by a computer.
- c. Processed data or information. **X**

2. Object Linking and Embedding (OLE) is:

- a. A type of communication.
- b. A kind of networking.
- c. A way to share data between applications. **X**

3. Trojan horses are:

- e. programs that migrate through networks and operating systems, and most attach themselves to different programs and databases.
- f. a special type of virus that does not attach itself to programs and databases.
- g. programs that come into a computer system disguised as something else. **X**

D. Answer 4 questions of following: :(20 Marks, each 5 marks)

4. Give an example of URL and write its main parts.



5. Write 3 type of Co-processors . **Graphics, Parallel, Smart Card.**
6. Write three types of Malicious Programs. **Viruses, Worms, Trojan horse.**
7. Draw the Hierarchical network topology diagram.



8. Write four needs of databases. **Sharing, Security, Less data redundancy, Data integrity.**

E. Link the equivalent words of following groups: :(10 Marks)

- | |
|----------------------------|
| a. Unix 3 |
| b. Digital camera 5 |
| c. Plug-in board 4 |
| d. Utilities 1 |
| e. Browsers 2 |

- | |
|-------------------------|
| 1. System software |
| 2. Application software |
| 3. Operating system |
| 4. Expansion cards |
| 5. Input device |

O- Select false or true of the following statements :(15 Marks).

11. Procedures: programs consisting of step-by-step instructions that tell the computer how to do its work. **False**
12. Tablet PC is type of minicomputers. **False**
13. Reading is the process of storing/saving the information to the secondary storage device. **False**
14. Transaction processing systems (TPS) called data processing systems (DPS). **True**
15. Metasearch engines focus on subject-specific Web sites. **False**

P- Choose the right answer :(15 Marks)

31. Plug-ins is:

- a. an Internet standard that allows you to connect to another computer.
- b. an Internet service for transferring files.
- c. a program that automatically loads and operates as part of your browser. **X**


32. RAID is:

- a. Groups of inexpensive hard-disk drives are grouped together. **X**
- b. Hard-Disk Cartridges.
- c. Removable hard disk, Massive storage capacity, Common in mainframes.

33. Intranets is:

- d. Private network that connects organizations.
- e. Private network within an organization. **X**
- f. A worldwide network.

K. Answer 4 questions of following: :(20 Marks, each 5 marks)

9. What are the basic elements of an e-mail message?. **Header(address, subject, attachment) Message, signature.**
10. Draw the star network topology and name its main components.

11. Write three basic types of Decision models. **Strategic, Tactical, Operational**
12. Write two of strategic uses of databases. **Data warehouse, Data mining.**
13. Give 4 examples of expansion cards. **Plug-in boards, Controller cards, Adapter cards, Interface cards.**

L. Link the equivalent words of following groups: :(10 Marks)

- | |
|-----------------------------|
| a. Access 2 |
| b. Backup 1 |
| c. Joystick 5 |
| d. Interface cards 4 |
| e. Network OS 3 |

- | |
|-------------------------|
| 1. System software |
| 2. Application software |
| 3. Operating system |
| 4. Expansion cards |
| 5. Input device |

Q- Select false or true of the following statements :(10 Marks).

- 16. Data is the raw of processed facts. **False**
- 17. Antivirus utilities *remove un-needed* programs. **False**
- 18. Crackers, typically, they are not criminals. **False**
- 19. In Object-Oriented Database, Objects contain only data. **False**
- 20. Metasearch engines focus on subject-specific Web sites. **False**

R- Choose the right answer :(10 Marks)

34. Embedded operating system stored in:

- 1. RAM
- 2. ROM **x**
- 3. Hard Disk

35. The relationship in Hierarchical Database are:

- d. One-to-many. **x**
- e. Many-to-many.
- f. one-to-one.

36. Tactical models:

- a. assist top-level managers in long-range planning
- b. help middle-level managers control the work of the organization. **x**
- c. help lower-level managers accomplish the organization's day-to-day activities

Q. Answer following questions :(30 Marks)

- 14. Write the 4 types of system software. (**operating systems, utilites, device drivers, translators**)
- 15. Draw the star network topology and name its main components.



- 16. Write three basic types of Decision models. **Strategic, tactical, operational.**

R. Link the equivalent words of following groups: :(10 Marks)

- | |
|-------------------------------|
| a. Record 2 |
| b. Company or shared 3 |
| c. Checklist 4 |
| d. Object-oriented 1 |

- | |
|----------------------------------|
| 1. Database structure |
| 2. Collection of related fields. |
| 3. Database uses |
| 4. Analyzing tools |

S- Select false or true of the following statements :(10 Marks)

- 37. Flash memory is a new type of ROM. **False**
- 38. Network operating system located on one computer's hard desk. **True**
- 39. Crackers, typically, they are criminals. **True**
- 40. In Object-Oriented Database, Objects contain only instructions. **False**
- 41. Tablet PC is type of minicomputers. **False**

T- Choose the right answer :(10 Marks)

7. Dial-Up connection services :

- h. Uses existing TV cable.
- i. Uses air Connections.
- j. Uses existing phone lines. **x**

8. Device Drivers are:

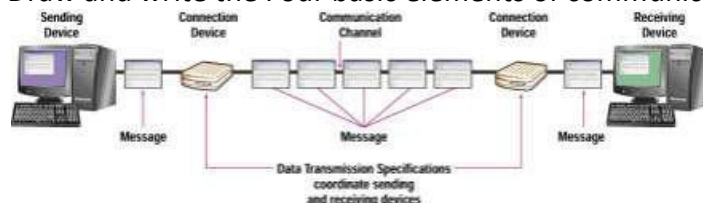
- c. Most important system software program that interacts with the application software and the computer.
- d. Perform *specific tasks related to managing computer resources*.
- e. Specialized programs to allow particular input and output devices to *communicate with the rest of the system*. **x**

9. Strategic models :

- a. assist top-level managers in long-range planning. **x**
- b. help middle-level managers control the work of the organization
- c. help lower-level managers accomplish the organization's day-to-day activities

G. Answer three questions of following: :(30 Marks)

- 9. Write four parts of Decision Support Systems DSS. **User, system software, Data and Decision models.**
- 10. Draw and write the Four basic elements of communication systems.



- 11. Give 4 examples of basic *general-purpose applications*. **(Word, Excel, Access, power point).**
- 12. Write the four types of computers. **(Super computers, Mainframes computers, Minicomputers and microcomputers).**

H. Link the equivalent words of following groups: :(10 Marks)

- a. Database **3**
- b. Individual database **4**
- c. Decision tables **2**
- d. Hierarchical **1**

- 1. Database structure
- 2. Analyzing tools
- 3. collection of related tables
- 4. Database uses

U- Select false or true of the following statements :(10 Marks)

42. Data stored on secondary storage need to be translated from the 1s & 0s when it is sent to the CPU for processing. **False**
43. Media or *medium*: *the actual physical material that holds the data*. **True**
44. Procedures: programs consisting of step-by-step instructions that tell the computer how to do its work. **False**
45. Home networks is kind of Wide area networks WAN. **False**
46. Uninstall *utilities* make copies of important files in case the original are lost. **False**

V- Choose the right answer :(10 Marks)

10. Dial-Up connection services :

- k. Uses existing TV cable.
- l. Uses air Connections.
- m. Uses existing phone lines. **x**

11. Terminals are:

- g. An input and output device. **x**
- h. Audio-Input Devices (MIDI).
- i. Audio-Output Devices.

12. Designing alternative systems is part of:

- h. System analysis phase.
- i. System development phase.
- f. System design phase. **x**

K. Answer three questions of following: :(30 Marks)

13. Write four of subsystems of a database management system.

Data definition subsystem
Data manipulation subsystem
Application generation subsystem
Data administration subsystem

14. Draw the Bus network topology diagram.



15. Write the five parts of an information system.

People, procedures, software, hardware, and data.

16. Write the three primary privacy issues.

Accuracy, Property, Access

L. Link the equivalent words of following groups: :(10 Marks)

- a. Webcam **5**
- b. Web authoring **2**
- c. TV tuner **4**
- d. Embedded OS **3**
- e. Antivirus **1**

- 1. System software
- 2. Application software
- 3. Operating system
- 4. Expansion cards
- 5. Input device